District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Received
Hobbs OCD

Form C-101
May 27, 2004

Submit to appropriate District Office

☒ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address	2 OGRID Number
XTO Energy Inc. 200 N. Loraine St., Ste 800 Midland, TX 79701	5380
	3 API Number 30 - 025-28586

4 Property Code	5 Property Name	6 Well No.
301587	North Vacuum ABO Unit	243

9 Proposed Pool 1	10 Proposed Pool 2
North Vacuum ABO	

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	26	17S	34E		657	North	1839	West	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	26	17S	34E		1690	North	780	West	Lea

Additional Well Information

11 Work Type Code	12 Well Type Code	13 Cable/Rotary	14 Lease Type Code	15 Ground Level Elevation
P	O	Rotary	S	4031.7
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
	9800'	ABO	Key Energy	ASAP

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
200'	+1000'	+1000'

Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume 20000 bbls Drilling Method:
Closed-Loop System ☐ Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48# H-40	400'	400	Circ to Surf
12-1/4"	8-5/8"	32# K-55/S-80	5000'	3875	Circ to Surf
7-7/8"	5-1/2"	15-1/2 #/17# K-55	8700'-4153'	925	Circ to top of liner

Permit Expires 1 Year From Approval Date Unless Drilling Underway

22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

* See attached procedure for adding lateral. Horizontal

MUD PROGRAM: 8.4-8.9 fresh water from kickoff point 8300'-8375' to 9800'

CIBP will be set between 8300'-8375' with whipstock for kickoff and directional drilling.

BOP: Case III 7-1/16" 3000# w/Hydril single pipe ram, blind ram and manifold

** Horizontal

KZ

23 I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Signature: Sorina L Flores

Printed name: Sorina L. Flores

Title: Drilling Tech

E-mail Address: Sorina_flores@xtoenergy.com

Date: 3/1/07 Phone: 432-620-6749

OIL CONSERVATION DIVISION

Approved by: Chris Williams

Title: DISTRICT SUPERVISOR/GENERAL MANAGER

Approval Date: MAR 13 2007 Expiration Date:

Conditions of Approval Attached ☐

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-28586	61760	North Vacuum ABO

Property Code	Property Name	Well Number
301587	NORTH VACUUM ABO UNIT	243 H

OGRID No.	Operator Name	Elevation
5380	XTO ENERGY INC.	4032'

Surface Location

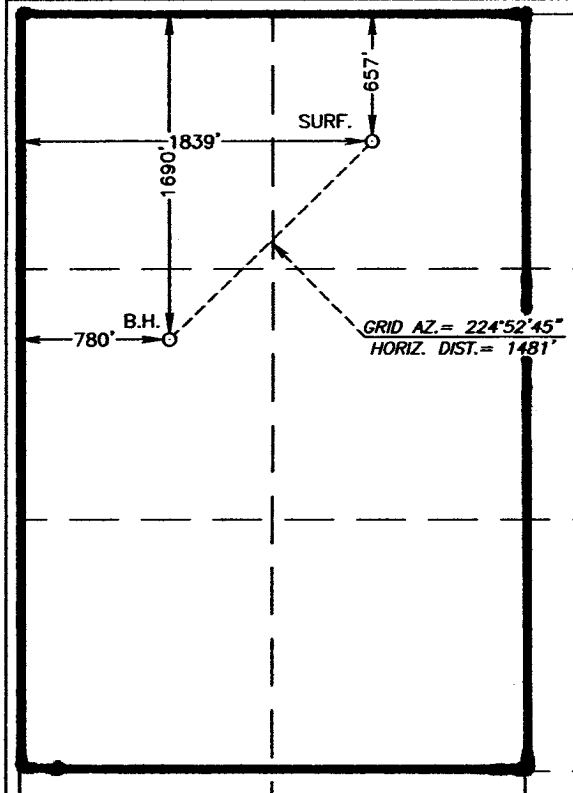
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	26	17-S	34-E		657	NORTH	1839	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	26	17-S	34-E		1690	NORTH	780	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y=659778.8 N
X=745792.1 E

LAT.=32.811264° N
LONG.=103.533329° W

BOTTOM HOLE LOCATION
Y=658733.5 N
X=744742.5 E

*This well being drilled under provisions of Rule 2 of North Vacuum ABO rules

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sorina L Flores 3/1/07
Signature Date

Sorina L. Flores
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 9, 2007
Date Surveyed AR

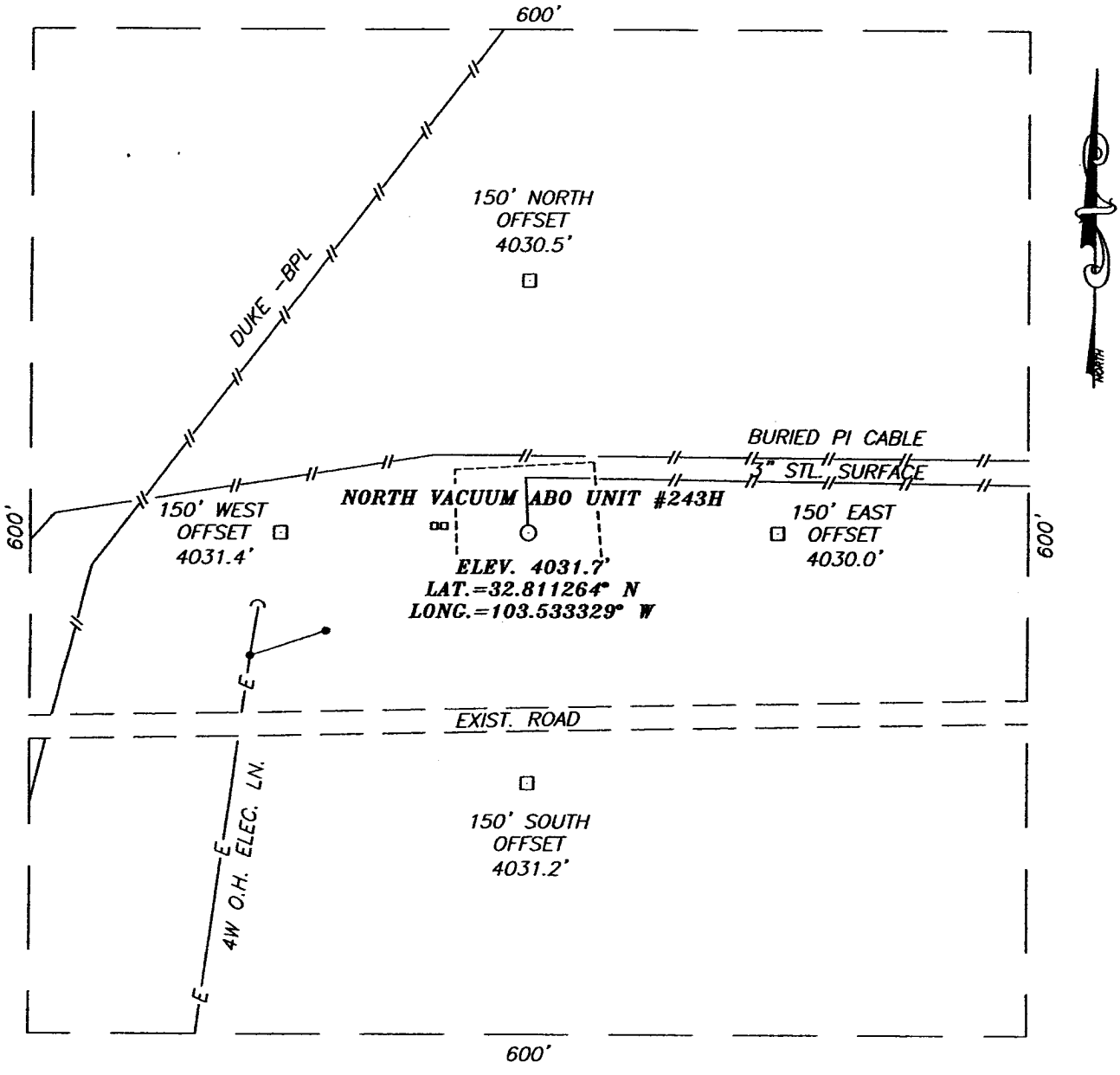
Signature & Seal of Professional Surveyor

Ronald J. Eidson 02/15/07
07.11.0165

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

SECTION 26, TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM BUCKEYE GO NORTH ON U.S. HWY. #8 APPROX. 0.5 MILES. TURN LEFT AND GO WEST APPROX. 0.7 MILES. TURN LEFT AND GO SOUTH APPROX. 0.1 MILES. VEER RIGHT AND CONTINUE ON WEST APPROX. 1.3 MILES. VEER RIGHT CONTINUE ON NORTH APPROX. 0.2 MILES. TURN RIGHT AND GO EAST APPROX. 0.2 MILES TO EXISTING NORTH VACUUM ABO UNIT #243 WELL.

100 0 100 200 Feet

Scale: 1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

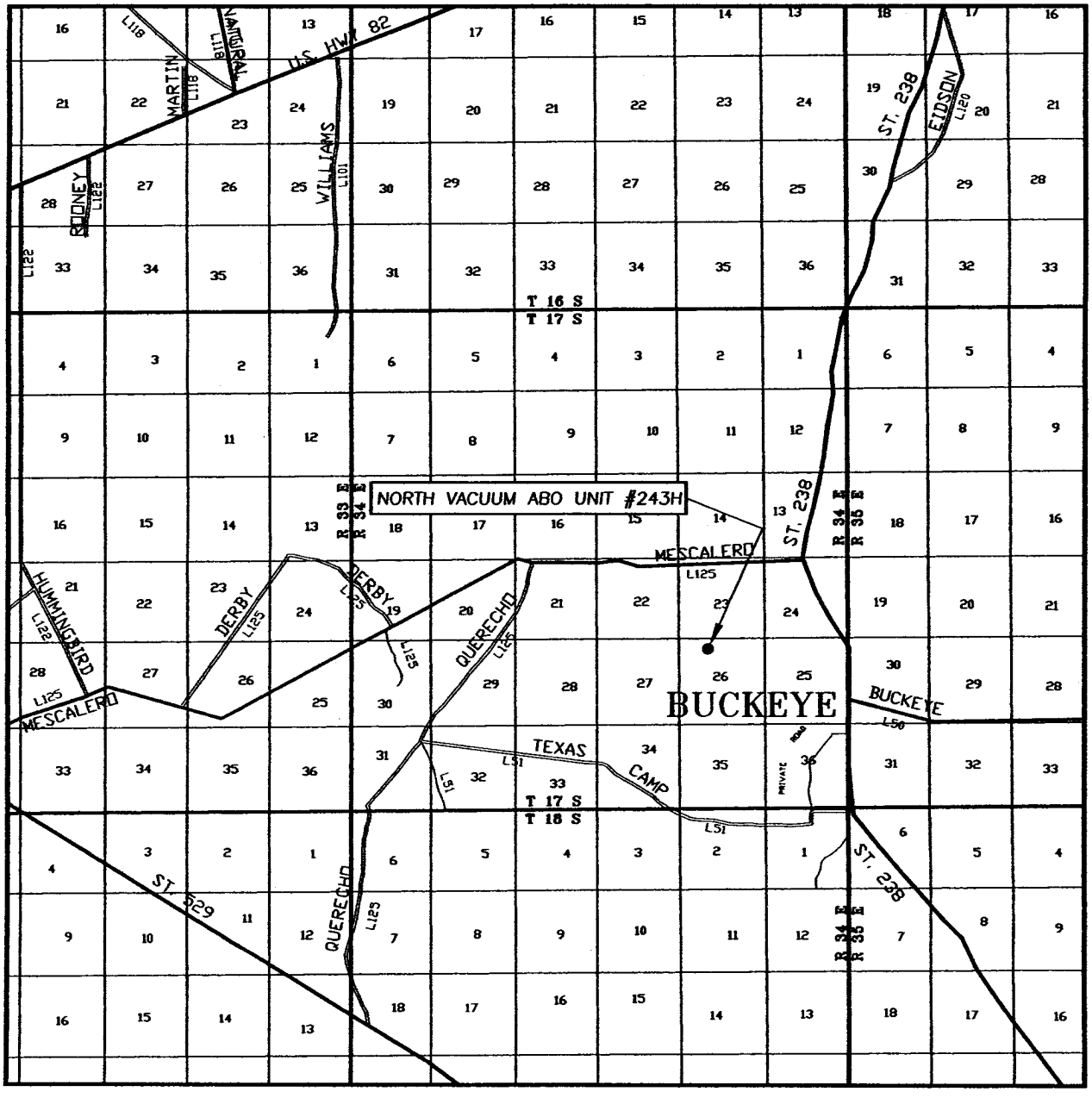
(505) 393-3117

XTO ENERGY INC.

NORTH VACUUM ABO UNIT #243H WELL
LOCATED 657 FEET FROM THE NORTH LINE
AND 1839 FEET FROM THE WEST LINE OF SECTION 26,
TOWNSHIP 17 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 02/09/07	Sheet 1 of 1 Sheets		
W.O. Number: 07.11.0165	Dr By: AR	Rev 1:N/A	
Date: 02/12/07	Disk:	07110165	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 26 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 657' FNL & 1839' FWL

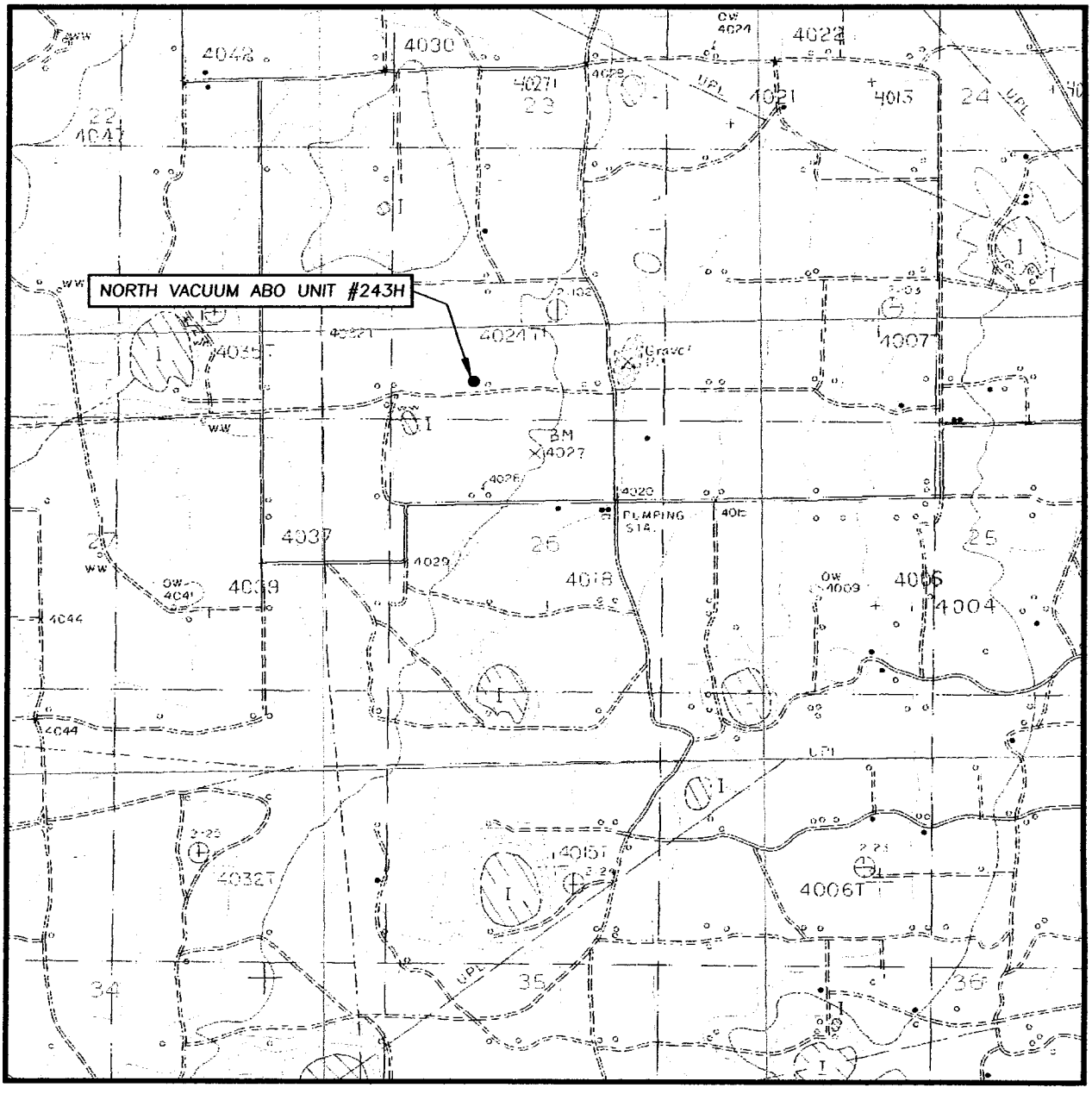
ELEVATION 4032'

OPERATOR XTO ENERGY INC.

LEASE NORTH VACUUM ABO UNIT

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BUCKEYE, N.M. – 10'

SEC. 26 TWP. 17-S RGE. 34-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 657' FNL & 1839' FWL

ELEVATION 4032'

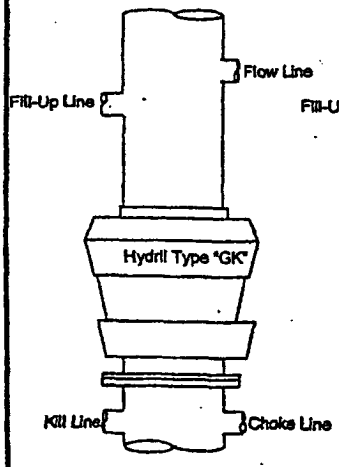
OPERATOR XTO ENERGY INC.

LEASE NORTH VACUUM ABO UNIT

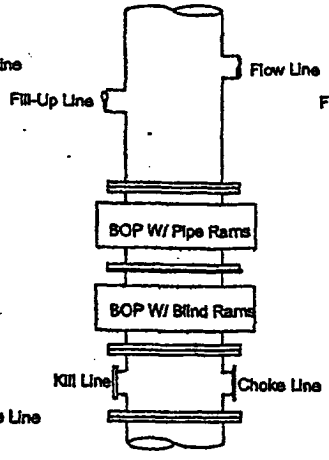
U.S.G.S. TOPOGRAPHIC MAP
BUCKEYE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

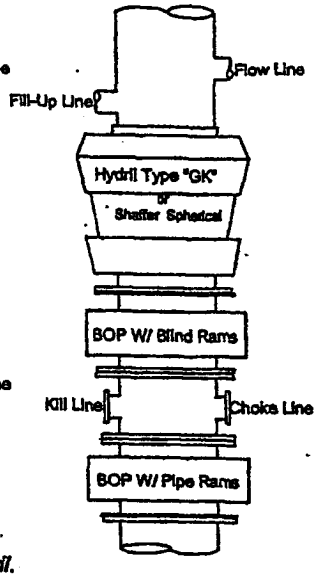
MINIMUM BLOWOUT PREVENTER REQUIREMENTS



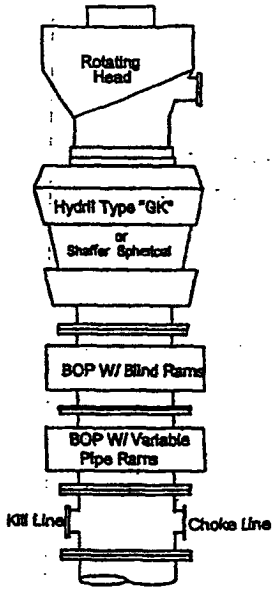
CASE I



CASE II



CASE III



CASE IV

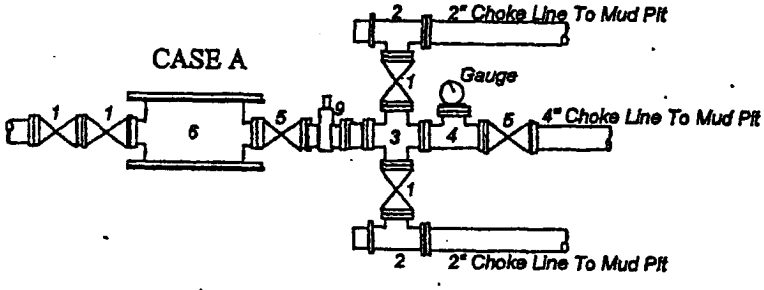
A1" valve will be installed on the closing line to the Hydril. This valve will on a short nipple next to the Hydril. The Hydril closing line must be equipped with a 1" - 3000 psi WP plug valve on the nipple into the Hydril.

BOP SIZE	BOP CASE	WORKING PRESSURE	CHOKE CASE
13-5/8"	IV	5000	A

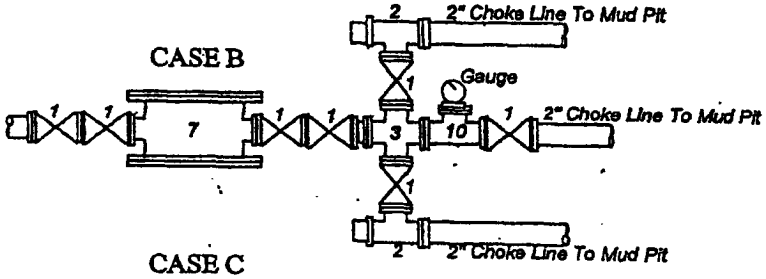
**Rotating head required*

Bradenhead furnished by Conoco will be:
Mfr: Wood Group
Description: 13-3/8" x 13-5/8" 3M
Type: SOW

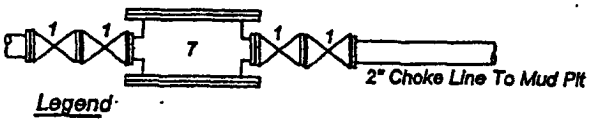
CASE A



CASE B



CASE C



Legend

1. *2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.*
2. *2" flanged adjustable chokes, min. 1" full opening & equiped with hard trim.*
3. *4" x 2" flanged steel cross.*
4. *4" flanged steel tee.*
5. *4" flanged all steel valve (Type as in no. 1).*
6. *Drilling Spool with 2" x 4" flanged outlet.*
7. *Drilling Spool with 2" x 2" flanged outlet.*
8. *2" x 2" flanged steel cross.*
9. *4" pressure operated gate valve.*
10. *2" flanged steel tee.*

Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

NVAC #243H
Horizontal Sidetrack Procedure
North Vacuum Abo Field
Lea County, New Mexico
AFE #710796
XTO WELL ID #61514

TD:	8700'
PBTD:	8695'
8-5/8" Casing:	5000'
5-1/2" Liner:	8700 – 4153' TOL, 5-1/2" 15.5# & 17# K-55 see wellbore diagram for all details
Surface Location:	657' FNL & 1839' FWL, Sec 26, T17S, R34E
Target BHL:	1690' FNL & 780' FWL, Sec 26, T17S, R34E
Drilled Date:	
Abo Perfs:	8494-8672' OA
Ground Elev:	4032'
Original KB Elev:	4042' ??? (10' AGL)
Key Energy #36:	4044' (12'AGL)

1. MIRU Key Rig #36. Install BOP. Test to 250# & 1000#. Notify NMOGB – permit attached.

2. Unload and tally ±6200' 2-7/8" 10.40# AOH & 4000' 3-1/2" 13.30# IF workstring. 10 3-1/4" or 3-1/2" Spiral DC's for weight. Knight Oil Tools has pipe.

3. R/U WSI WL. Run gauge ring and junk basket for 5-1/2" 17# (drift ID – 4.767") to 8500'. Log up and tie into csg collars @ 8419.5', 8378', 8339', 8298' (see attached log). P/U Baker Oil Tools wireline set 5-1/2" 17# RBP. Set RBP so that the top will be at 8335' RD WL.

4. PU 4-3/4" dummy milling assbly or 4-3/4" flat bottom mill with the 2-7/8" AOH & 3-1/2" IF drill pipe and TIH. Tag up on the RBP @ 8335', set down 20,000# of weight on the RBP. Circulate the hole with fresh water. TOOH with assbly.

5. PU Weatherford Services Whipstock System (3° face) with metal muncher mills. **Note: Make sure all mills will gauge to 4.75". Minimum DD is 4.767".** Total length of the whipstock assembly in the set position is approximately 12'. Orient the UBHO sub and whipstock face on the surface. Insert the gyro stinger (Scientific Drilling) to ensure compatibility and to check orientation.

6. TIH with the whipstock assembly slowly, being careful when picking the string up off of the slips and when setting the slips. Fill DP every 2000'. Tag the RBP at 8335' with 2000# of weight. PU to first tool joint and RU Scientific Drilling gyro truck. Orient the whipstock to the desired azimuth and work the torque out of the drill string.

7. When desired orientation is achieved, tag the RBP with 2000# of weight, take a final check shot with gyro, then apply weight and set the anchor with 20,000# compression to shear the running bolt. RD WL truck.

8. Obtain values for free torque, PU & SO weights. Install ditch magnets at the surface. Lower milling assembly and make the starting cut through the casing wall at approximately 8323'.

9. Mill the remainder of the window, 8323-29', making the necessary rat hole (8335') to ensure that the string mill has fully opened the window, and that the window exit is smooth. Work the mills through the window. When the window is "clean", circulate the hole clean, TOOH and LD the window mills.

10. PU 4-3/4" bit (Smith XR 30 PS), PU 's 3-1/2" dir assbly w Non-Mag DC & GammaRay, run surface tests, and TIH. ***Mud loggers should be rigged up after cutting the window and prior to commencing the curve.*** Use Gyro for first few surveys. Follow attached well plan from Schlumberger. Open hole lateral length is +/- 1200'. **For trips out of the hole, circ hole clean with polymer sweep(s). TOH slowly in the curve and lateral, if necessary consider pumping out.**

11. At TD, circulate the hole clean with polymer sweeps.

12. TOOH and LD directional tools.

13. TIH with 4-3/4" (4-1/2") swaging tool, single reamer about 7-8 jts behind swaging tool, wash and ream to TD. POH and place 2nd reamer 1 jt behind 1st, wash and ream to TD, pull back up through the window, RIH for push pull test to btm, circ hole clean.

14. TOOH & LDDP. RD Re-entry Rig. Prepare to move to the next location.

Chip
3/1/07

MASTER GEOLOGICAL WELL PLAN & AFE REQUEST (Single Horizontal Well)

For Direcional Information Use the Yellow Tab Below.

OPERATOR:	**XTO Energy**	BY:	Richard Simpson
WELL NAME:	**NVAU 243 H**	DATE:	2/31/2007
LOCATION:	SEC 26 TWN 17S RNG 34E (North Vacuum Abo Unit)	COUNTY / STATE:	Lea, New Mexico
SHL	657 FNL and 1839 FWL	Spud Date:	2007
BHL	1690 FNL and 780 FWL	Remarks:	
PROPOSED T.V.D.:	8584'		
PROPOSED T.D.:	9,763		

Geologist:	Richard Simpson	Office:	(817)-885-2386
If no response, please leave a message and wait at least 15 minutes before calling the backup.		Home:	(817)-447-3633
		Cell:	(817)-703-8579
Backup Contact	Charles Ways	Office:	817-885-2801
(If Richard Simpson is unavailable)		Home:	817-557-1937
		Cell: (Call Cell First)	817-680-8302

EXPECTED FORMATION TOPS: Aprox KB 4036'

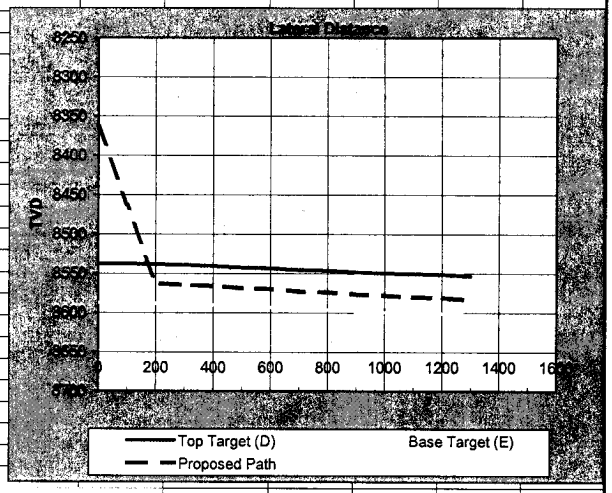
Formation	Subsea Depth (feet)	Well Depth (feet)
Abo A	-4,374'	8,410'
Abo D	-4,422'	8,458'
Abo E	-4,466'	8,502'

MUD LOG:			
DEPTH ON	DEPTH OFF	MUD LOGGING COMPANY	TYPE UNIT
After milling window	TD	Suttles	2-man
SAMPLES:	Caught & Bagged	Depth Interval	No. of Sets of Samples
1 full bag	Every 10 feet	window'-TD	1 set of dry samples
OPENHOLE LOGS:	TYPE LOGS	WELL DEPTH	LOG INTERVAL
LOGGING COMPANY:	To Be Determined		Casing to TD
Logs:	**GR while drilling**		
Remarks:	E-Mail GR and Survey twice daily to **"richard_simpson@xtoenergy.com"**		
Well Type:			
DEVELOPMENT:	XX	NEW WELL:	OIL: XX
EXPLORATORY:		RE-ENTRY: XX	GAS:
REMARK:			INJECTOR:
DRILL STEM TESTS:	FORMATION	DEPTH	DEFINITE/POSS/PROB
1)	NONE		
2)			
CORES:	FORMATION	CORE INTERVAL	CORE ANALYSIS
1)	NONE		
2)			
Special Instructions:			
(Poss. Lost Circ.; Hi-Press Zones; Mud Properties, etc)			

NVAU 243 H

Approx Length		1264'
HZ Direction		222°
Inflection point.:		None
Window Depth (ft)		8363

Lateral Distance	Proposed Path	Top Target SS (D)	Top Target MD (D)	Base Target SS (E)	Base Target MD (E)	KB
0	8363	-4489	8537	-4539	8587	4048
100	8463	-4489	8537	-4539	8587	4048
200	8563	-4490	8538	-4540	8588	4048
300	8565	-4491	8539	-4541	8589	4048
400	8566	-4492	8540	-4542	8590	4048
500	8569	-4494	8542	-4544	8592	4048
600	8570	-4495	8543	-4545	8593	4048
700	8573	-4497	8545	-4547	8595	4048
800	8574	-4498	8546	-4548	8596	4048
900	8577	-4500	8548	-4550	8598	4048
1,000	8578	-4501	8549	-4551	8599	4048
1,100	8580	-4502	8550	-4552	8600	4048
1,200	8581	-4503	8551	-4553	8601	4048
1,300	8584	-4505	8553	-4555	8603	4048



Vertical Tolerance= 10 feet up or down.

Remarks: Open Hole Completion

Do not go below 8563' at the end of the turn at approximately 89 degrees.